

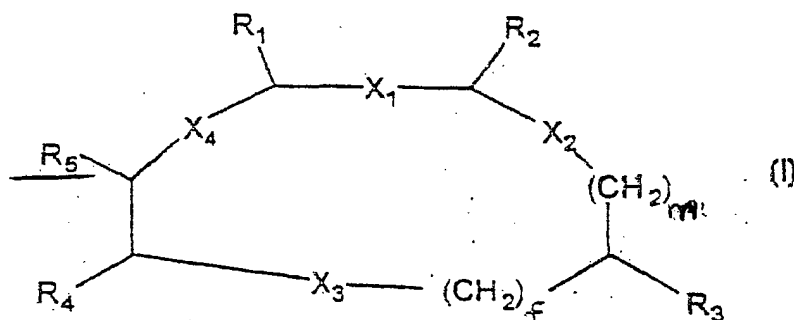
IN THE CLAIMS

21. (Currently Amended) Monocyclic compounds of formula (I)

wherein:

5

10



15

X₁, X₂, X₃, X₄ are the same or different, and are selected from the group consisting of

-CONR-, -NRCO-, -CH₂-NR-, and -NR-CH₂- where R is selected from the group consisting of H,

C₁₋₃ alkyl, and benzyl;

f and m are the same or different, and is are a number selected from the group consisting of 0, 1 and

2;

20

R₁ and R₂, are the same or different, and represent:

-(CH₂)_r Ar where r is 0, 1 or 2 and Ar is an aromatic group selected from the group consisting of

benzene, naphthalene, thiophene, benzothiophene, pyridine, quinoline, indole, furan, benzofuran,

thiazole, benzothiazole, imidazole, benzoimidazole, optionally substituted with up to 2 substituents

selected from the group consisting of C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkyloxy, C₂₋₄ amino-alkyloxy,

25

halogens, OH, NH₂, CN, and NR₆R₇, where R₆ and R₇, same or different, are H or C₁₋₃ alkyl,

R₃ is -(CH₂)_r Ar₁ where r is 0, 1 or 2 and Ar₁ is an aromatic group selected from the group consisting

of benzene, naphthalene, thiophene, benzothiophene, pyridine, quinoline, indole, furan, benzofuran,

thiazole, benzothiazole, imidazole, and benzimidazole,

- optionally substituted with up to 2 groups selected from the group consisting of C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkyloxy, amino-alkyloxy, halogens, OH, NH₂, and NR₆R₇, where R₆ and R₇, same or different, are H or C₁₋₃ alkyl,
- R₄ is ~~NR₈R₉~~; -N(R₁₁)CO(CH₂)_hR₁₂; or -COR₁₃; where R₅ is H; where R₈ is H or C₁₋₃ alkyl; h is 0, 1, 2 or 3; and R₉ is selected from the group consisting of methanesulfonyl, tosyl, tetrahydropyranyl, tetrahydrothiopyranyl optionally mono or di-substituted by oxygen on the S atom, piperidyl, optionally substituted on the N-atom by a C₁₋₃ alkyl, C₁₋₃ acyl, aminosulfonyl, or methanesulfonyl; or a group-(CH₂)_gR₁₀ where g is 1, 2, or 3 and R₁₀ is selected from the group consisting of morpholine, furan and CN;
- or R₈ and R₉ together with the N atom to which they are linked form a piperazine optionally substituted at the other N atom ~~substituted~~ by a C₁₋₃ alkyl, C₁₋₃ acyl or methanesulfonyl;
- ~~-N(R₁₁)CO(CH₂)_hR₁₂~~ where R₁₁ is H or C₁₋₃ alkyl; h is 0, 1, 2 or 3; and R₁₂ is selected from the group consisting of morpholine, pyrrolidine optionally substituted with a hydroxy or hydroxymethyl, piperidine optionally substituted with a 4-hydroxy or 4-carboxyamido ~~or 4-aminosulfonyl group~~;
- piperazine optionally substituted on the N-atom by 4-aminosulfonyl, C₁₋₃ alkyl, triazole, tetrazole, 5-mercapto-tetrazole, furan, thiophene, thiomorpholine, optionally mono or di-oxygenated on the S-atom, and ~~amino-cyclohexane~~ cyclohexan-1-yl-amino optionally substituted by a hydroxy group;
- ~~-COR₁₃~~ wherein R₁₃ is a member selected from the group consisting of morpholine and piperazine optionally substituted by a C₂₋₆ alkyl containing one or more hydroxy groups;
- their enantiomers and mixtures thereof, their diastereoisomers, and their pharmaceutically acceptable salts.

22. (Currently Amended)

Compound according to Claim 21 wherein:

f is 1

m is 0

X₁, X₂, X₃, X₄, are the same or different and are a member selected from the group consisting of -CONR- and -NRCO-,

5 where R is H or methyl,

R₁ and R₂ are the same or different, are:

-CH₂Ar wherein Ar is an aromatic group selected from the group consisting of benzene, pyridine, indole, optionally substituted with up to two substituents selected from the group consisting of C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkyloxy, C₂₋₄ amino alkyloxy, halogens, OH, NH₂, CN, and NR₆R₇,
10 where R₆ and R₇, same or different, and are H or C₁₋₃ alkyl;

R₃ is -CH₂Ar₁ wherein Ar₁ is an aromatic group selected from the group consisting of alpha naphthyl, beta naphthyl, phenyl, phenyl substituted with up to two substituents selected from the group consisting of C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkyloxy, halogens, OH, and NH₂.

23. (Currently Amended) Compounds according to Claim 22 wherein:

15 - X₁, X₂, X₃, X₄ are -CONH-,

- R₁ is indol-3-yl-methyl

- R₂ is phenyl-methyl optionally substituted with up to two substituents selected from the group consisting of chlorine, fluorine, CF₃, OH and CN; or ~~are~~ is selected from the group consisting of 3-pyridyl-methyl and 4-pyridyl-methyl;

20 - R₃ is benzyl.

24. (Previously Added) Compounds according to claim 23 wherein:

R₄ is a group NR₈R₉ wherein:

25 R₈ is H or methyl;

R₉ selected from the group consisting of 4-tetrahydropyranyl, 4-tetrahydrothiopyranyl, 1-oxo-tetrahydrothiopyran-4-yl, 1,1-dioxo-tetrahydrothiopyran-4-yl, N-methyl-4-piperidinyl, N-methanesulfonyl-4-piperidinyl, and N-aminosulfonyl-4-piperidinyl,

or R₈ and R₉ together with the N atom to which they are linked represent N-methyl-piperazinyl,

5 N-acetyl-piperazinyl or N-methanesulfonyl-piperazinyl.

25. (Previously Amended) Compounds according to Claim 24 represented by:

- i) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- 10 ii) cyclo{Suc[1-(S)-(4-tetrahydropyranyl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- iii) cyclo{Suc[1-(R)-(1-methyl-piperidin-4-yl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- iv) cyclo{Suc[1-(R)-(4-tetrahydrothiopyranyl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- v) cyclo{Suc[1-(R)-(1-oxo-tetrahydrothiopyran-4-yl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- 15 vi) cyclo{Suc[1-(R)-(1,1-dioxo-tetrahydrothiopyran-4-yl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- vii) cyclo{Suc[1-(R)-N-methyl-N-(4-tetrahydropyranyl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- viii) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Tyr-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- 20 ix) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Phe(4-F)-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- x) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Phe(3,5-F)-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- xi) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Phe(4-CN)-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}
- 25 xii) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Phe(4-CF₃)-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

-CH₂NH}}

xiii) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Ala(4-pyridyl)-[(R)-NH-CH(CH₂-C₆H₅)

-CH₂NH}}

xiv) cyclo{Suc[1-(R)-(4-tetrahydropyranyl)amino]-Trp-Ala(3-pyridyl)-[(R)-NH-CH(CH₂-C₆H₅)

5 -CH₂NH}}

xv) cyclo{Suc[1-(R)-(1-methylsulfonyl-piperidin-4-yl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)

-CH₂NH}}

xvi) cyclo{Suc[1-(R)-(1-aminosulfonyl-piperidin-4-yl)amino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)

-CH₂NH}}

10 xvii) cyclo{Suc[1-(R)-4-methyl-piperazin-1-yl]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xviii) cyclo{Suc[1-(R)-4-acetyl-piperazin-1-yl]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]} or

xix) cyclo{Suc[1-(R)-4-methylsulfonyl-piperazin-1-yl]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}.

15

26. (Previously Amended) Compounds according to Claim 23 wherein:

R₄ represents a group NR₈R₉, where R₈ is H and R₉ is methanesulfonyl, tosyl or a group

-(CH₂)_gR₁₀, wherein g is 1 or 2 and R₁₀ is morpholine, furan, or CN.

20

27. (Previously Amended) Compounds according to claim 26 represented by:

xx) cyclo{Suc[1-(S)-methylsulfonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxi) cyclo{Suc[1-(R)-methylsulfonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxii) cyclo{Suc[1-(S)-(4-methylphenyl)sulfonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxiii) cyclo{Suc[1-(R)-(4-methylphenyl)sulfonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

25 xxiv) cyclo{Suc[1-(S)-2-(4-morpholino)ethylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxv) cyclo{Suc[1-(R)-2-(4-morpholino)ethylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxvi) cyclo{Suc[1-(R)-(2-furyl)methylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]} or

xxvii) cyclo{Suc[1-(R)-cyanomethylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}.

5

28. (Previously Added) Compounds according to claim 23 wherein:

R₄ is a group - N(R₁₁)CO(CH₂)_h-R₁₂ wherein R₁₁ is H, h is 0 or 1, and R₁₂ is selected from the group consisting of 1-tetrazolyl, 5-mercapto-tetrazol-1-yl, 1-triazolyl, furanyl, thiophenyl, morpholine, 4-
10 hydroxy-piperidine, 4-carboxyamido-piperidine, 3-hydroxy-pyrrolidine, 2-hydroxymethylpyrrolidine, 4-methyl-piperazine, 4-aminosulfonyl-piperazine, 1-oxo-thiomorpholine, and 4-hydroxy-cyclohexan-1-yl-amino.

29. (Previously Added) Compounds according to Claim 28 represented by:

15 xxviii) cyclo{Suc[1-(R)-2-(4-morpholino)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxix) cyclo{Suc[1-(S)-2-(4-morpholino)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxx) cyclo{Suc[1-(S)-2-(tetrazol-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxxii) cyclo{Suc[1-(R)-2-(tetrazol-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

20 xxxii) cyclo{Suc[1-(S)-2-(5-mercapto-tetrazol-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxxiii) cyclo{Suc[1-(R)-2-([1,2,4]triazol-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxxiv) cyclo{Suc[1-(R)-2-(furanyl)carbonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

25 xxxv) cyclo{Suc[1-(R)-2-(thiophen-3-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxxvi) cyclo{Suc[1-(R)-(4-morpholino)carbonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

xxxvii) cyclo{Suc[1-(R)-2-(4-hydroxy-piperidin-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}

- C₆H₅)-CH₂NH]}}
- xxxviii) cyclo{Suc[1-(R)-2-(4-aminocarbonyl-piperidin-1-yl)acetylamino]-Trp-Phe-[(R)-NH
-CH(CH₂-C₆H₅)-CH₂NH]}}
- xxxix) cyclo{Suc[1-(R)-2-(3-hydroxy-pyrrolidin-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂
5 -C₆H₅)-CH₂NH]}}
- xl) cyclo{Suc[1-(R)-2-(2-(S)-hydroxymethyl-pyrrolidin-1-yl)acetylamino]-Trp-Phe-[(R)
-NH-CH(CH₂-C₆H₅)-CH₂NH]}}
- xli) cyclo{Suc[1-(R)-2-(4-methyl-piperazin-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)
-CH₂NH]}}
- 10 xlii) cyclo{Suc[1-(R)-2-(4-methyl-piperazin-1-yl)carbonylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)
-CH₂NH]}}
- xliii) cyclo{Suc[1-(R)-2-(4-aminosulfonyl-piperazin-1-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂
-C₆H₅)-CH₂NH]}}
- xliv) cyclo{Suc[1-(R)-2-(1-oxo-thiomorpholin-4-yl)acetylamino]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-
15 CH₂NH]}} or
- xlv) cyclo{Suc[1-(R)-2-(*trans*-4-hydroxy-cyclohexan-1-yl-amino)acetylamino]-Trp-Phe-[(R)-NH
-CH(CH₂-C₆H₅)-CH₂NH]}}.
- 20 30. (Previously Amended) Compounds according to Claim 23 wherein:
R₄ represents a group COR₁₃ wherein R₁₃ is morpholine.
31. (Previously Amended) Compounds according to claim 30 represented by:
- xlvi) cyclo{Suc[1-(4-morpholino)carbonyl]-Trp-Phe-[(R)-NH-CH(CH₂-C₆H₅)-CH₂NH]}}.
- 25

32. (Previously Added) Pharmaceutical compositions containing as active principle compounds of general formula (I) according to Claim 21 in combination with pharmaceutically acceptable carriers or excipients.

5 33. (Previously Added) A method for the treatment of the bronchospastic component of asthma, cough, pulmonary irritation, intestinal spasms or local spasms of bladder, ureters during cystitis, kidney infections and colics wherein amounts of 0.1 to 10mg/kg body weight of an active principle represented by compounds of formula (I) according to Claim 21 are administered to the patient.